

What is claimed is:

1. A method of reproducing content information stored on an interactive medium comprising:

reproducing first data read out from the interactive medium in synchronization with second data received from a content providing server over a network;

sensing a failure in receiving the second data;

upon sensing the failure in receiving the second data, re-synchronizing the first data read out from the interactive medium with the second data received from the content providing server over the network; and

after a re-synchronization delay, continuing to reproduce the first data in synchronization with the second data, wherein the second data contains information for synchronization and re-synchronization.

2. The method according to claim 1, wherein the information for synchronization and re-synchronization includes at least one of a number of bytes per second and a number of bytes per frame.

3. The method according to claim 1, wherein the information for synchronization and re-synchronization is repeated at least three times within the second data.

4. The method according to claim 1, wherein information for synchronization and re-synchronization is contained within a header portion of the second data.

5. The method according to claim 1, wherein the failure in receiving the second data is due to a disconnection or a delay of transmission of the second data over the network.

6. The method according to claim 1, wherein during the re-synchronization delay the first data is reproduced, and the second data is

muted and not reproduced.

7. The method according to claim 1, wherein during the re-synchronization delay the first data is reproduced, and interpolated second data is reproduced.

8. The method according to claim 1, wherein during the re-synchronization delay the first data is reproduced, and a previous segment of the second data is reproduced.

9. The method according to claim 1, wherein the first data is at least one of video data and audio data, and the second data is audio data.

10. The method according to claim 1, wherein the network is the Internet.

11. The method according to claim 1, wherein the interactive medium is an interactive optical disc.

12. The method according to claim 1, wherein the information for synchronization and re-synchronization includes a number of bytes per second, and the number of bytes per second is a constant value.

13. The method according to claim 1, wherein said re-synchronization step includes:

calculating an offset value for the second data to establish re-synchronization;

sending a command requesting transmission of the second data corresponding to the calculated offset value to the content providing server; and

re-synchronizing the second data transmitted in response to the command with the first data read out from the interactive medium.

14. The method according to claim 13, wherein said calculating step is based on a present playing time of the first data read from the interactive medium and the number of bytes per second of the second data.

15. The method according to claim 13, wherein the offset value of the second data capable of re-synchronization is calculated by adding the present playing time of the first data to a predetermined amount of time and multiplying the result by the number of bytes per second of the second data.

16. The method according to claim 15, wherein the predetermined amount of time is determined in proportion to a speed of the second data being transferred over the network.

17. An apparatus for reproducing content information stored on an interactive medium comprising:

- a renderer reproducing first data read out from the interactive medium in synchronization with second data received from a content providing server over a network; and

- a processor sensing a failure in receiving the second data, and upon sensing the failure in receiving the second data, re-synchronizing the first data read out from the interactive medium with the second data received from the content providing server over the network, and after a re-synchronization delay, causing said renderer to continue reproducing the first data in synchronization with the second data, wherein said processor evaluates information for synchronization and re-synchronization contained within the second data.

18. The apparatus according to claim 17, wherein the information for synchronization and re-synchronization includes at least one of a number of bytes per second and a number of bytes per frame.

19. The apparatus according to claim 17, wherein the information for synchronization and re-synchronization is repeated at least three times

within the second data.

20. The apparatus according to claim 17, wherein the information for synchronization and re-synchronization is contained within a header portion of the second data.

21. The apparatus according to claim 17, wherein the failure in receiving the second data is due to a disconnection or a delay of transmission of the second data over the network.

22. The apparatus according to claim 17, wherein during the re-synchronization delay the first data is reproduced, and the second data is muted and not reproduced.

23. The apparatus according to claim 17, wherein during the re-synchronization delay the first data is reproduced, and interpolated second data is reproduced.

24. The apparatus according to claim 17, wherein during the re-synchronization delay the first data is reproduced, and a previous segment of the second data is reproduced.

25. The apparatus according to claim 17, wherein the first data is at least one of video data and audio data, and the second data is audio data.

26. The apparatus according to claim 17, wherein the network is the Internet.

27. The apparatus according to claim 17, wherein the interactive medium is an interactive optical disc.

28. The apparatus according to claim 17, wherein the information for synchronization and re-synchronization includes a number of bytes per

second, and the number of bytes per second is a constant value.

29. The apparatus according to claim 17, wherein said processor, in re-synchronizing the first data and second data, calculates an offset value for the second data to establish re-synchronization; sends a command requesting transmission of the second data corresponding to the calculated offset value to the content providing server; and re-synchronizes the second data transmitted in response to the command with the first data read out from the interactive medium.

30. The apparatus according to claim 29, wherein said processor in calculating the offset value uses a present playing time of the first data read from the interactive medium and the number of bytes per second of the second data.

31. The apparatus according to claim 29, wherein the offset value of the second data capable of re-synchronization is calculated by said processor by adding the present playing time of the first data to a predetermined amount of time and multiplying the result by the number of bytes per second of the second data.

32. The apparatus according to claim 31, wherein the predetermined amount of time is determined in proportion to a speed of the second data being transferred over the network.

33. An interactive medium for playing in an apparatus which reproduces first data stored on the interactive medium in synchronization with second data received from a content providing server over a network, said interactive medium comprising:

first data representing at least one of video data and audio data; and
second data representing audio data, wherein said second data includes information for synchronization and re-synchronization.

34. The interactive medium according to claim 33, wherein the information for synchronization and re-synchronization includes at least one of a number of bytes per second and a number of bytes per frame.

35. The interactive medium according to claim 33, wherein the information for synchronization and re-synchronization is repeated at least three times within the second data.

36. The interactive medium according to claim 33, wherein the information for synchronization and re-synchronization is contained within a header portion of the second data.

37. The interactive medium according to claim 33, wherein the interactive medium is an interactive optical disc.

38. The interactive medium according to claim 33, wherein the information for synchronization and re-synchronization includes a number of bytes per second, and the number of bytes per second is a constant value.